



**Nordisk Microfiber**

# **Life Cycle Assessment Cradle to Gate**

**Mikro Vision Mop, 40 cm**

**2025-12-19**

# Summary



## 01 | Methodology



## 02 | Results

# 01

## Methodology

# Environmental Impact Assessment

## Functional unit

The functional unit of this analysis is "Product 'Mikro Vision Mop, 40 cm' (product code: FA-43-47-B) is made of 68% recycled polyester + 24% polyester + 8% polyamide, weighs 0.089 kgs, and is certified under GRS / Swan Ecolabel"

## Impact Indicator

The impact is measured through the "EF v3.1 method" method

## Hypothesis

The data source for the emission factors is Ecolnvent 3.12. The System Model used is allocation, cut-off by classification.

Where data was not available from NMF, conservative estimates have been applied.

Assumptions include; origin of raw materials (GLO, IN averages) and manufacturing processes (GLO averages).

# Environmental Impact Assessment

## System Boundaries

The scope of this study is Cradle-to-Gate and assesses according to EF v3.1 as LCIA (Life Cycle Impact Assessment) method is developed by the European Commission.

This method is compatible with ISO 14040/44 and PEF. This LCA has not been independently reviewed.

## Exclusions

The following stages have been excluded: Downstream Transportation, Use and End-of-Life.

# Emission Factor Inventory

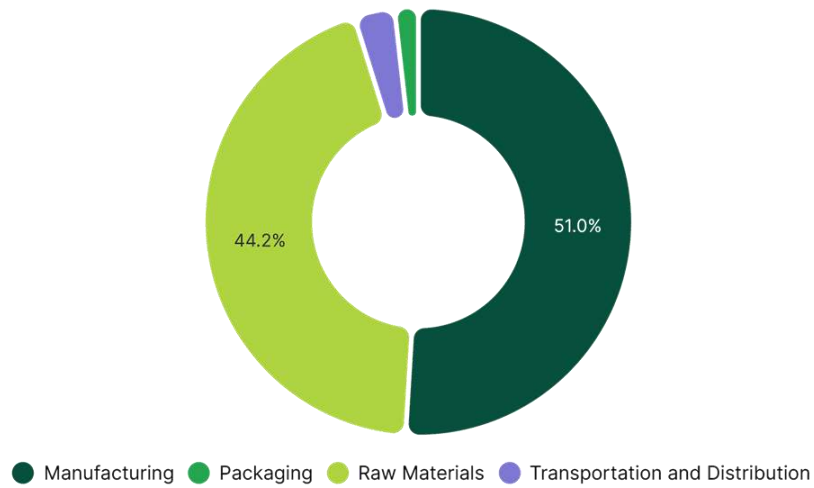
Num	Emission Factor	Source	Value	Unit
1	Polyethylene terephthalate, granulate, amorphous   Market for polyethylene terephthalate, granulate, amorphous   Market activity	ECOINVENT 3.12	3.70	kg
2	Polyethylene terephthalate, pellets, recycled fibre based   Market for polyethylene terephthalate, pellets, recycled fibre based   Market activity	ECOINVENT 3.12	1.23	kg
3	Weaving, synthetic fibre   Market for weaving, synthetic fibre   Market activity	ECOINVENT 3.12	0.56	kg
4	Fibre, polyester   Polyester fibre production, finished   Ordinary transforming activity	ECOINVENT 3.12	4.78	kg
5	Corrugated board box   Market for corrugated board box   Market activity	ECOINVENT 3.12	1.27	kg
6	Printed paper   Market for printed paper   Market activity	ECOINVENT 3.12	2.54	kg
7	Transport, freight, lorry, diesel, unspecified   Market for transport, freight, lorry, unspecified   Market activity	ECOINVENT 3.12	0.16	metric_t_km
8	Transport, freight, sea, container ship, heavy fuel oil   Market for transport, freight, sea, container ship, heavy fuel oil   Market activity	ECOINVENT 3.12	0.01	metric_t_km

# 02

## Results

Mikro Vision Mop, 40 cm

# Climate Change

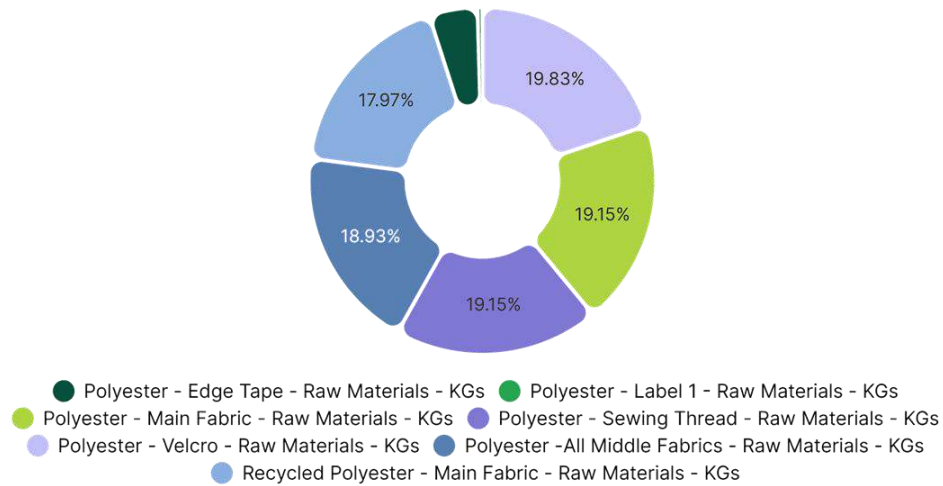


Step	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Manufacturing	0.47	50.95 %
Raw Materials	0.41	44.21 %
Transportation and Distribution	0.03	3.06 %
Packaging	0.02	1.78 %
TOTAL	0.93	100.00 %



Mikro Vision Mop, 40 cm

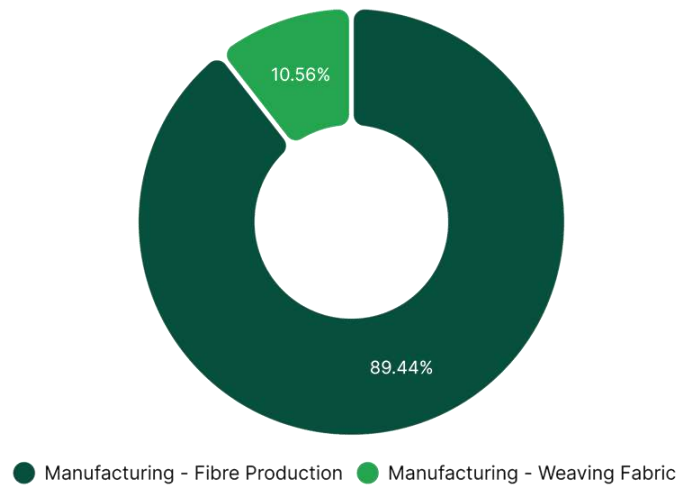
# Climate Change - Raw Materials



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Polyester - Velcro - Raw Materials - KGs	1	0.02	kg	0.08	19.83 %
Polyester - Main Fabric - Raw Materials - KGs	1	0.02	kg	0.08	19.15 %
Polyester - Sewing Thread - Raw Materials - KGs	1	0.02	kg	0.08	19.15 %
Polyester -All Middle Fabrics - Raw Materials - KGs	1	0.02	kg	0.08	18.93 %
Recycled Polyester - Main Fabric - Raw Materials - KGs	2	0.06	kg	0.07	17.97 %
Polyester - Edge Tape - Raw Materials - KGs	1	5 · 10 <sup>-3</sup>	kg	0.02	4.51 %
Polyester - Label 1 - Raw Materials - KGs	1	5 · 10 <sup>-4</sup>	kg	1.85 · 10 <sup>-3</sup>	0.45 %
TOTAL				0.41	100.00 %

Mikro Vision Mop, 40 cm

# Climate Change - Manufacturing



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Manufacturing – Fibre Production	4	0.09	kg	0.42	89.44 %
Manufacturing – Weaving Fabric	3	0.09	kg	0.05	10.56 %

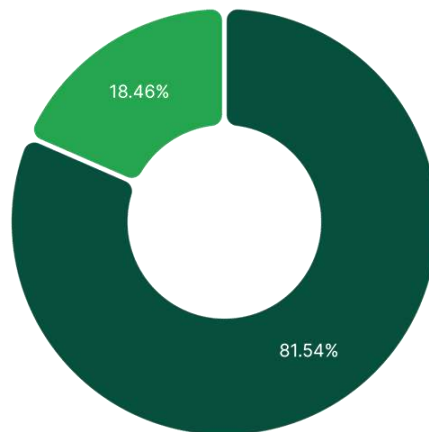
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TOTAL				0.47	100.00 %
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Mikro Vision Mop, 40 cm

# Climate Change - Packaging



● Cardboard Box - Tertiary Packaging - KGs ● Paper Banner - Secondary Packaging - KGs

Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Cardboard Box - Tertiary Packaging - KGs	5	0.01	kg	0.01	81.54 %
Paper Banner - Secondary Packaging - KGs	6	1.2 · 10 <sup>-3</sup>	kg	3.04 · 10 <sup>-3</sup>	18.46 %

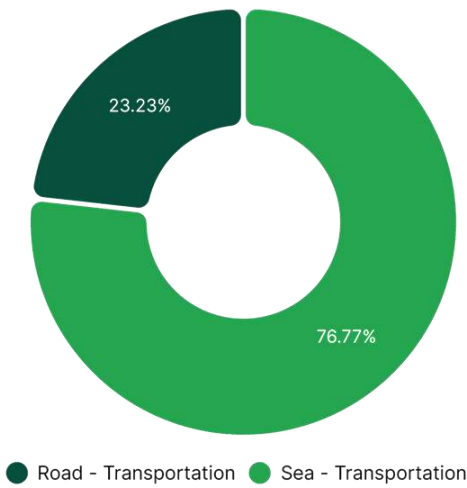
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TOTAL				0.02	100.00 %
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Mikro Vision Mop, 40 cm

# Climate Change - Transportation and Distribution



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Sea - Transportation	8	2.26	metric_t_km	0.02	76.77 %
Road - Transportation	7	0.04	metric_t_km	6.6 · 10 <sup>-3</sup>	23.23 %
TOTAL					100.00 %

This LCA was carried out by Sustaina Company using the Greenly software. This LCA has not been third party verified.